



FEATURES:

- Ultra Wide Input 4:1 Range
- Full SMD Technology
- 1600 VDC Isolation
- Efficiency up to 92%
- Soft Start
- Adjustable Output Voltage
- Remote ON/OFF Function
- Over Current, Voltage, & Temperature Protection
- Operating temperature -40°C to + 85°C



Models
Single output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Isolation (VDC)	Efficiency (%)
AM40UW-2403SZ	9-36	3.3	10	1600	89
AM40UW-2405SZ	9-36	5	8	1600	91
AM40UW-2412SZ	9-36	12	3.35	1600	90
AM40UW-2415SZ	9-36	15	2.65	1600	90
AM40UW-4803SZ	18-75	3.3	10	1600	90
AM40UW-4805SZ	18-75	5	8	1600	92
AM40UW-4812SZ	18-75	12	3.35	1600	90
AM40UW-4815SZ	18-75	15	2.65	1600	90

Models
Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Isolation (VDC)	Efficiency (%)
AM40UW-2412DZ	9-36	±12	±1.65	1600	89
AM40UW-2415DZ	9-36	±15	±1.35	1600	90
AM40UW-4812DZ	18-75	±12	±1.65	1600	80
AM40UW-4815DZ	18-75	±15	±1.35	1600	90

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24 48	9-36 18-75		VDC
Filter	π(Pi) Network			
Start up time		25		ms
Absolute Maximum Rating	24 48		50 100	VDC
Peak Input Voltage time			100	ms
On/Off control	ON -3.0 -12 (or open) ; OFF -0 -1.2 (or short pin 2 to pin 3) Off idle current: 5mA			
No Load Input Current		100		mA
Under voltage lockout	24 ON/OFF 48 ON/OFF	8.6/7.9 17.6/16		VDC
Input reflected ripple current		20		mA p-p

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	3 sec		1600	VDC
Resistance		>1000		MOhm
Capacitance		2500		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		±1		%
Cross Regulation (Dual Output Models)	25% load on one output - 100% load on second load	±5		%
Over voltage protection		Zener Diode Clamp		
Over current protection	Full Load	150		%
Short Circuit protection		Continuous		
Short circuit restart		Auto-Restart		
Thermal shutdown	On Case	110		°C
Line voltage regulation		±0.5		% of Vin
Load voltage regulation (Single)	I _{out} =0% to 100%	±0.5		%
Load voltage regulation (Dual)		±1		%
Temperature coefficient		±0.02		%/°C
Ripple & Noise	20MHz Bandwidth	150		mV p-p
Voltage adjustment range		±10		%
Minimum Load Current		0		% of Max

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	270		KHz
Operating temperature	With derating above 55 °C (see graph below)	-40 to +85		°C
Storage temperature		-40 to +125		°C
Maximum case temperature			105	°C
Derating	Above 55 °C	2		%/°C
Cooling		Free Air Convection		
Humidity			95	% RH
Case material		Nickel – coated Copper		
Weight		60		g
Dimensions (L x W x H)		2.00 x 2.00 x 0.40 inches	50.81 x 50.81 10.14 mm	
MTBF		>1500000 hrs Calculated using MIL-HDBK-217 F at +25 °C		
Maximum soldering temperature	1.5mm from case for 10 sec	260		°C
Transient recovery time		250		µS
Transient recovery deviation		±3		mS

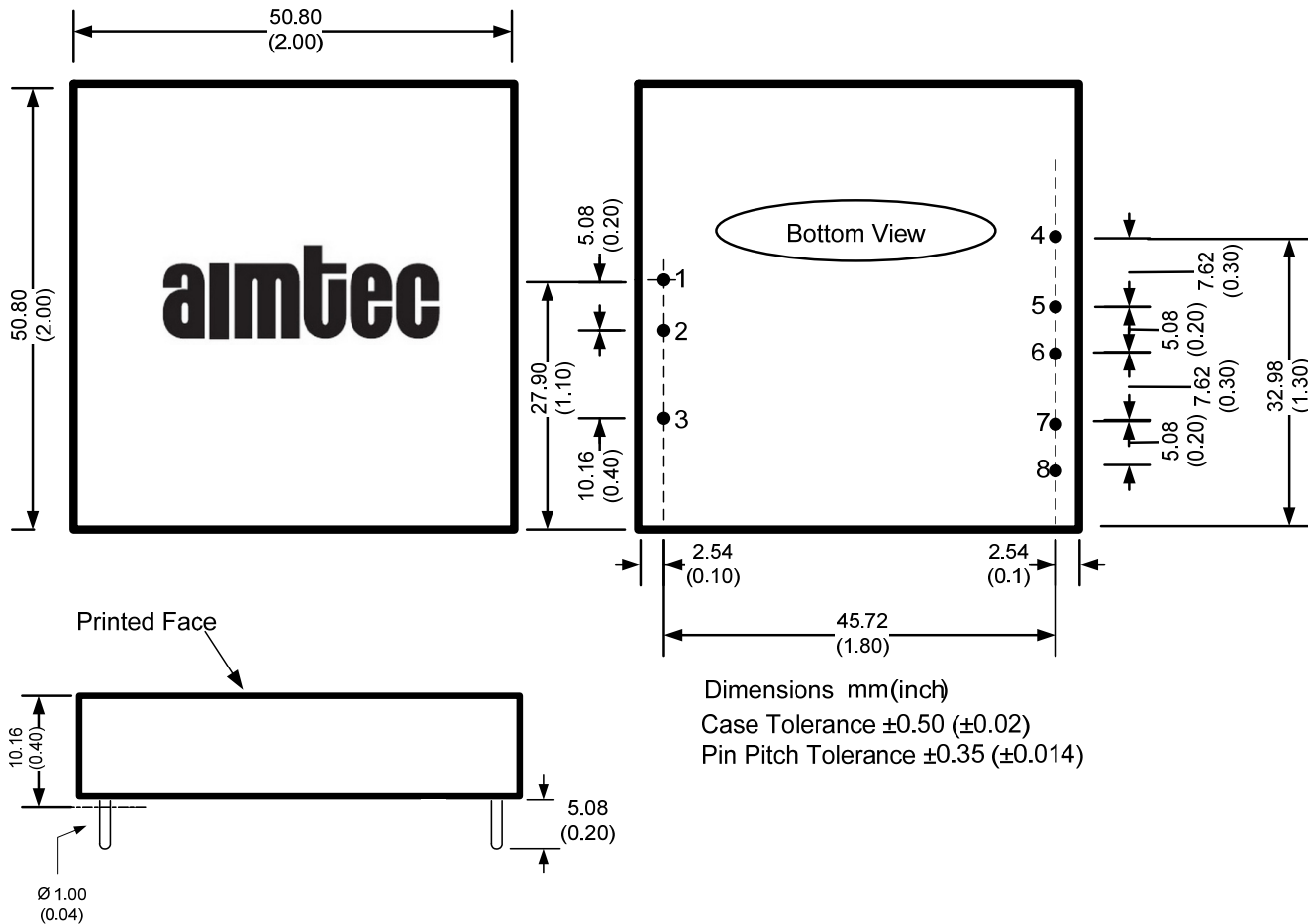
Safety Specifications

Standards	
Agency Approval	CE, meet IEC 60950-1:2001
Safety	EN55022: 2006 + A1:2007, Class A
	EN55024:1998 + A1:2001 + A2:2003
	IEC61000-4-2:1995 + A1:1998 + A2:2000, Perf. Criteria B
	IEC61000-4-3:2006, Perf. Criteria A
	IEC61000-4-4:2004, Perf. Criteria B (external 220µF/100V cap required)
	IEC61000-4-5:2005, Perf. Criteria B (external 220µF/100V cap required)
	IEC61000-4-6:2007, Perf. Criteria A
	IEC61000-4-8, Perf:1993 + A1:2000, Criteria A

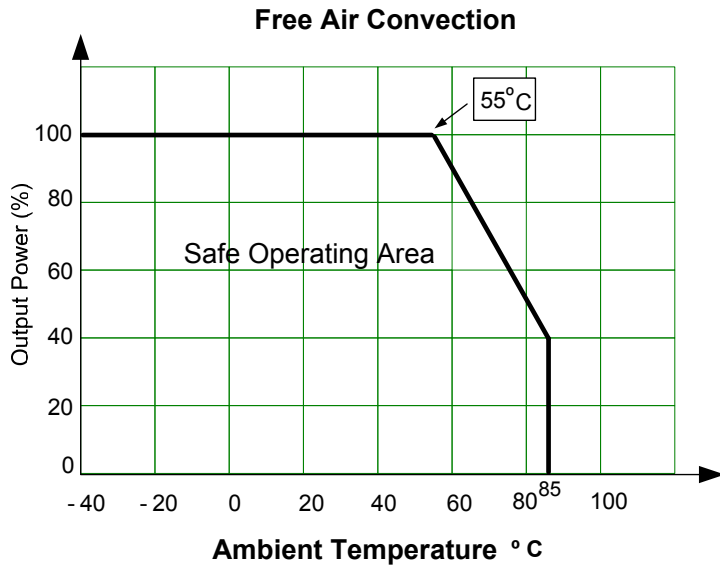
Pin Out Specifications

Pin	Single	Dual
1	+V Input	+V Input
2	-V Input	-V Input
3	On/Off Control	On/Off Control
4	- Sense	+V Output
5	+ Sense	Common
6	+V Output	Common
7	-V Output	-V Output
8	Trim	Trim

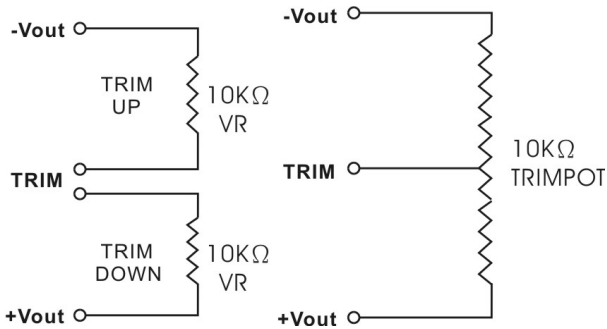
Dimensions



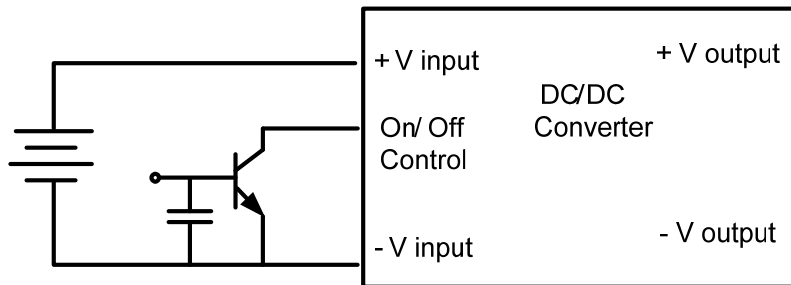
Derating



Trimming

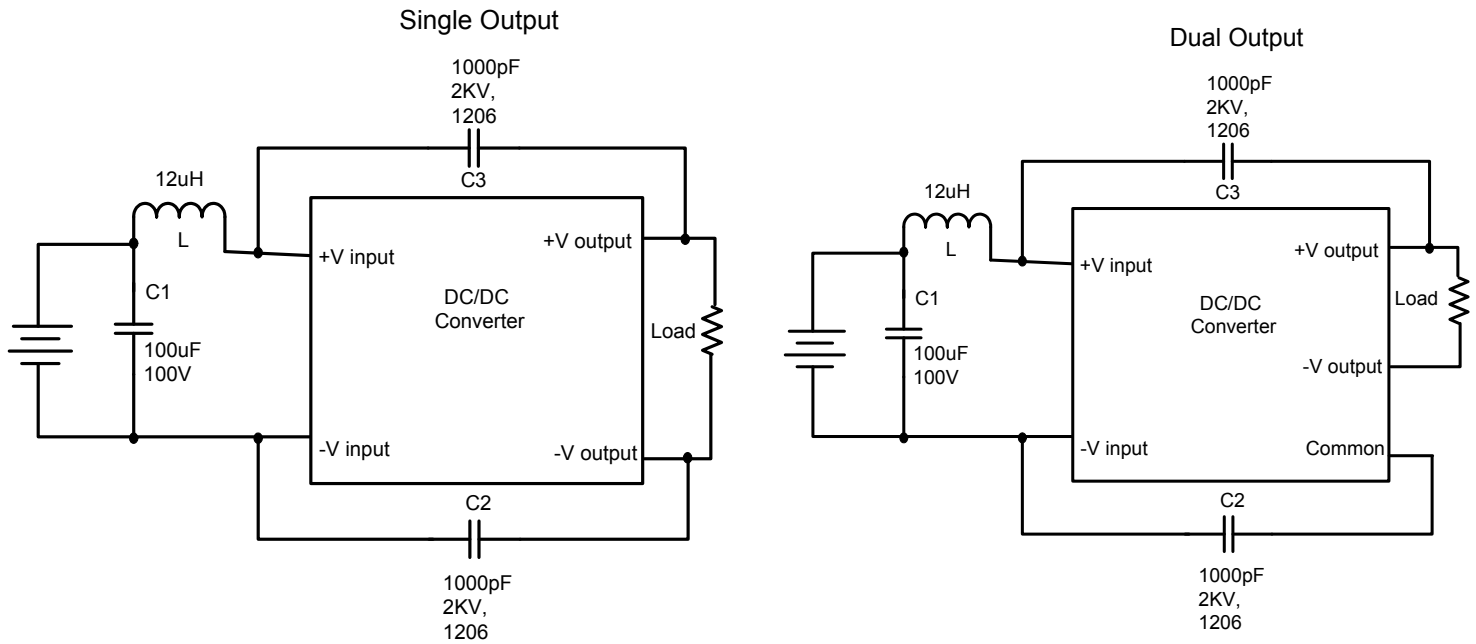


Control ON/OFF

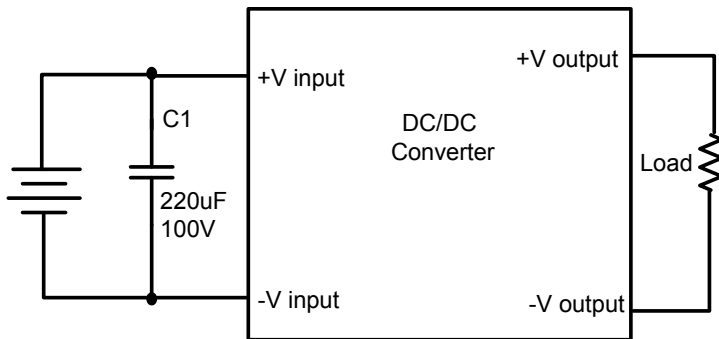


Recommended Circuits

Conducted and Radiated Emissions



EFT/Surge



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